HAMPTON ROADS SANITATION DISTRICT

HRSD

P. O. BOX 5911, VIRGINIA BEACH, VIRGINIA 23471-0911 • (757) 460-2261 FAX (757) 460-2372

www.hrsd.com

August 31, 2006

RECEIVED
SEP 01 2006
PRO

Mrs. Gina Kelly
Dept. of Environmental Quality
Piedmont Regional Office
4949-A Cox Road
Glen Allen, VA 23060

RE: King William STP VA0088102
Permit Modification

Dear Mrs. Kelly:

Please find enclosed the additional information (VPDES Permit Application Addendum and Sewage Sludge Permit Application Form) as requested per your email of August 24, 2006. HRSD has no plans to change the solids management plan for this facility at this time. The solids will be dried in drying beds and hauled to the landfill.

Please contact my office if you have any questions or desire further information.

Sincerely,

James J. Pletl, Ph.D.
Chief of Technical Services Division

Enclosure

VPDES SEWAGE SLUDGE PERMIT APPLICATION FORM

SCREENING INFORMATION

This application is divided into sections. Sections A pertain to all applicants. The applicability of Sections B, C and D depend on your facility's sewage sludge use or disposal practices. The information provided on this page will help you determine which sections to fill out.

1. All applicants must complete Section A (General Information).

2. Will this facility generate sewage sludge? _X_ Yes __ No

   Will this facility derive a material from sewage sludge? __ Yes _X_ No

   If you answered Yes to either, complete Section B (Generation Of Sewage Sludge Or Preparation Of A Material Derived From Sewage Sludge).

3. Will this facility apply sewage sludge to the land? __ Yes _X_ No

   Will sewage sludge from this facility be applied to the land? __ Yes _X_ No

   If you answered No to both questions above, skip Section C.

   If you answered Yes to either, answer the following three questions:

   a. Will the sewage sludge from this facility meet the ceiling concentrations, pollutant concentrations, Class A pathogen reduction requirements and one of the vector attraction reduction requirements 1-8, as identified in the instructions?
   __ Yes __ No

   b. Will sewage sludge from this facility be placed in a bag or other container for sale or give-away for application to the land? __ Yes __ No

   c. Will sewage sludge from this facility be sent to another facility for treatment or blending? __ Yes __ No

   If you answered No to all three, complete Section C (Land Application Of Bulk Sewage Sludge).

   If you answered Yes to a, b or c, skip Section C.

4. Do you own or operate a surface disposal site? __ Yes _X_ No

   If Yes, complete Section D (Surface Disposal).

SECTION A. GENERAL INFORMATION

All applicants must complete this section.

1. Facility Information.
   a. Facility name: King William STP
   b. Contact person: James Pletl
      Title: Chief of Technical Services Division
      Phone: (757)460-4246
   c. Mailing address:
      Street or P.O. Box: PO Box 5911
      City or Town: Virginia Beach State: VA Zip: 23471
   d. Facility location:
      Street or Route #: 542 Acquinton Church Road
      County: King William
      City or Town: King William State: VA Zip: 23086
   e. Is this facility a Class I sludge management facility? ___Yes _X_No
   f. Facility design flow rate: 0.10 proposed capacity mgd
   g. Total population served: 1600
   h. Indicate the type of facility:
      _X_ Publicly owned treatment works (POTW)
      ___ Privately owned treatment works
      ___ Federally owned treatment works
      ___ Blending or treatment operation
      ___ Surface disposal site
      ___ Other (describe):

2. Applicant Information. If the applicant is different from the above, provide the following:
   a. Applicant name: Hampton Roads Sanitation District
   b. Mailing address:
      Street or P.O. Box: PO Box 5911
      City or Town: Virginia Beach State: VA Zip: 23471
   c. Contact person: James Pletl
      Title: Chief of Technical Services Division
      Phone: (757)460-4246
   d. Is the applicant the owner or operator (or both) of this facility?
      _____owner ___X___ operator
   e. Should correspondence regarding this permit be directed to the facility or the applicant? (Check one)
      _____ facility ___X___ applicant

3. Permit Information.
   a. Facility's VPDES permit number (if applicable): VA0088102
   b. List on this form or an attachment, all other federal, state or local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices:

Permit Number:	Type of Permit:

4. Indian Country. Does any generation, treatment, storage, application to land or disposal of sewage sludge from this facility occur in Indian Country? ___Yes _X_No If yes, describe:

5. Topographic Map. Provide a topographic map or maps (or other appropriate maps if a topographic map is unavailable) that shows the following information. Maps should include the area one mile beyond all property boundaries of the facility:
   a. Location of all sewage sludge management facilities, including locations where sewage sludge is generated, stored, treated, or disposed.
   b. Location of all wells, springs, and other surface water bodies listed in public records or otherwise known to the applicant within 1/4 mile of the property boundaries.

6. Line Drawing. Provide a line drawing and/or a narrative description that identifies all sewage sludge processes that will be employed during the term of the permit including all processes used for collecting, dewatering, storing, or treating sewage sludge, the destination(s) of all liquids and solids leaving each unit, and all methods used for pathogen reduction and vector attraction reduction. Solids are pumped to aerobic digester and then to two drying beds. Dried solids are transported to landfill.

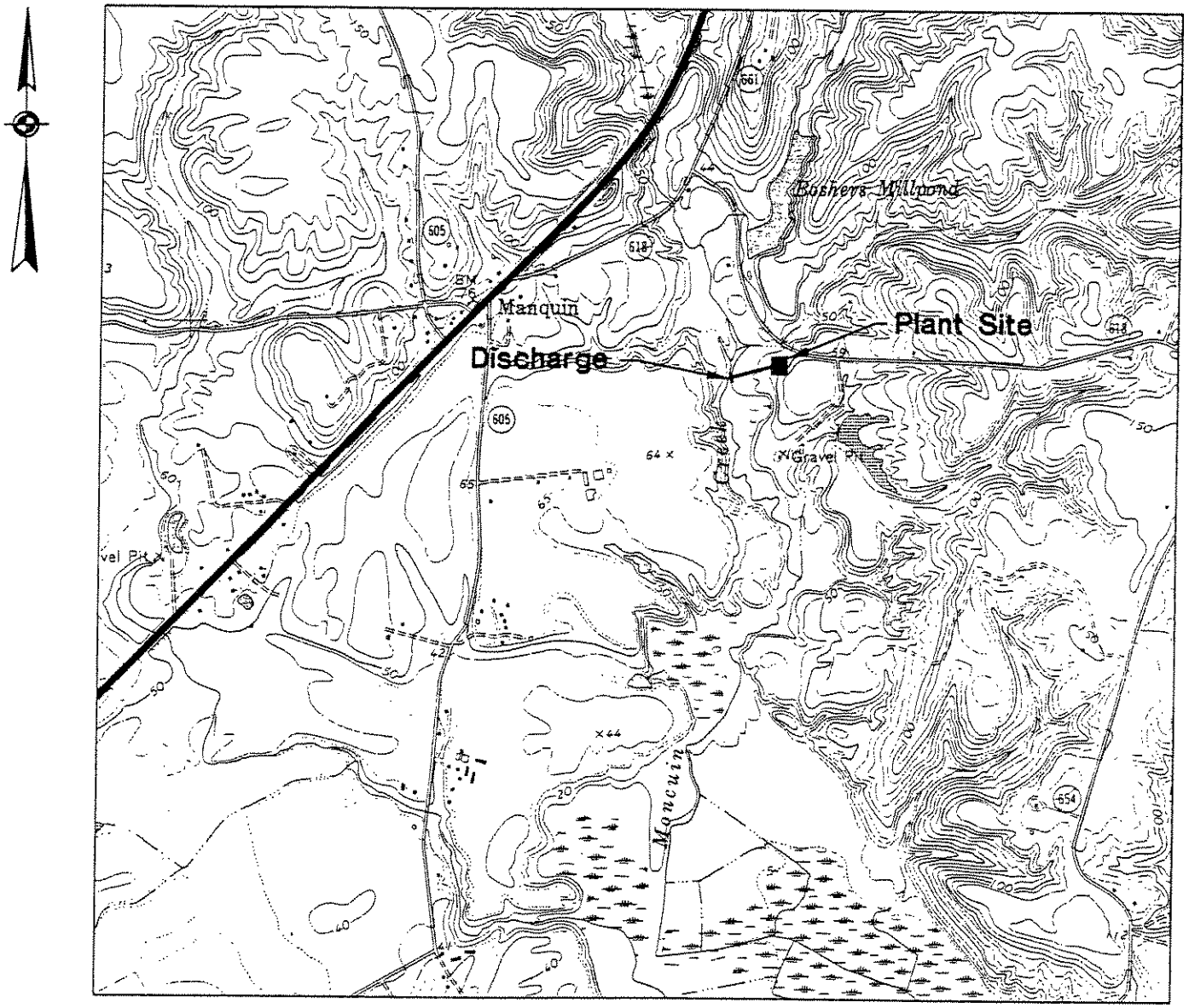
7. Contractor Information. Are any operational or maintenance aspects of this facility related to sewage sludge generation, treatment, use or disposal the responsibility of a contractor? _X_ Yes __ No
If yes, provide the following for each contractor (attach additional pages if necessary).
Name: Virginia Peninsula Public Service Authority

Mailing address: 300 McLaws Circle Suite 200
Street or P.O. Box:
City or Town: Williamsburg State: VA Zip: 23185
Phone: (757)259-9850
Contractor's Federal, State or Local Permit Number(s) applicable to this facility's sewage sludge: Transfer station is operated under permit by rule 9VAC 20-80 et. seq.

If the contractor is responsible for the use and/or disposal of the sewage sludge, provide a description of the service to be provided to the applicant and the respective obligations of the applicant and the contractor(s). Contractor operates transfer station where biosolids are taken.

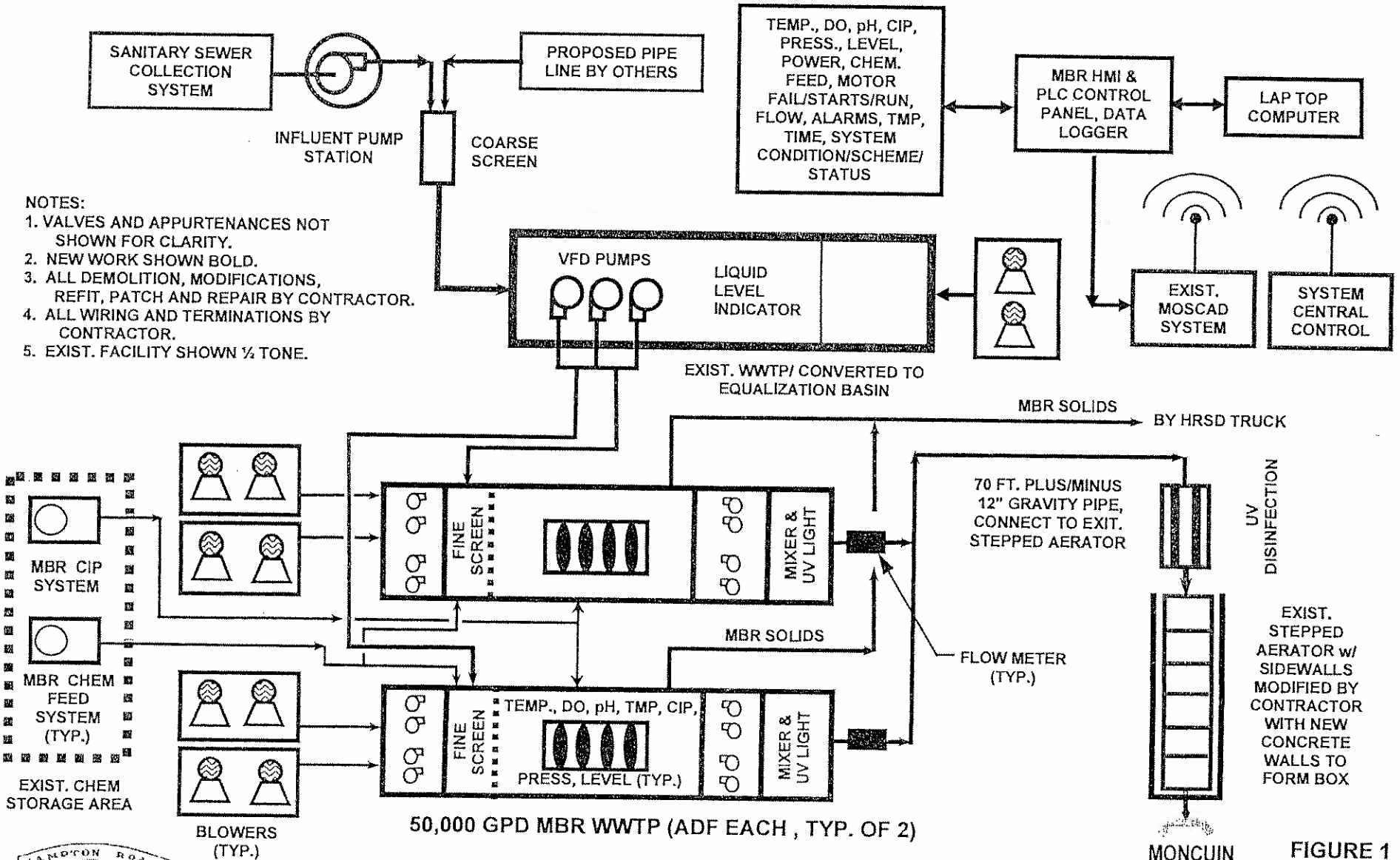
8. Pollutant Concentrations. Using the table below or a separate attachment, provide sewage sludge monitoring data for the pollutants which limits in sewage sludge have been established in 9 VAC 25-31-10 et seq. for this facility's expected use or disposal practices. All data must be based on three or more samples taken at least one month apart and must be no more than four and one-half years old.

POLLUTANT	CONCENTRATION (mg/kg dry weight)	SAMPLE DATE	ANALYTICAL METHOD	DETECTION LEVEL FOR ANALYSIS
Arsenic	No data available			
Cadmium	No data available			
Chromium	No data available			
Copper	No data available			
Lead	No data available			
Mercury	No data available			
Molybdenum	No data available			
Nickel	No data available			
Selenium	No data available			
Zinc	No data available			



Location Map
for
King William STP

October 2003 Scale: 1"=2000' USGS Map Reference



50,000 GPD MBR WWTP (ADF EACH , TYP. OF 2)

FIGURE 1
JULY 19, 2006

HRSD KING WILLIAM MBR WASTEWATER TREATMENT PLANT

NOT TO SCALE

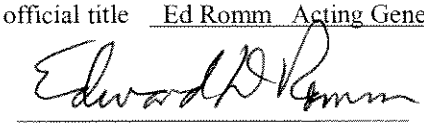
015230007-5

9. Certification. Read and submit the following certification statement with this application. Refer to the instructions to determine who is an officer for purposes of this certification. Indicate which parts of the application you have completed and are submitting:

__X__ Section A (General Information)
__X__ Section B (Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge)
____ Section C (Land Application of Bulk Sewage Sludge)
____ Section D (Surface Disposal)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title Ed Romm Acting General Manager

Signature  Date Signed 08/31/2006

Telephone number 757-460-2261

Upon request of the department, you must submit any other information necessary to assess sewage sludge use or disposal practices at your facility or identify appropriate permitting requirements.

SECTION B. GENERATION OF SEWAGE SLUDGE OR PREPARATION OF A MATERIAL DERIVED FROM SEWAGE SLUDGE

Complete this section if your facility generates sewage sludge or derives a material from sewage sludge

1. Amount Generated On Site.
   Total dry metric tons per 365-day period generated at your facility: 0 dry metric tons

2. Amount Received from Off Site. If your facility receives sewage sludge from another facility for treatment, use or disposal, provide the following information for each facility from which sewage sludge is received. If you receive sewage sludge from more than one facility, attach additional pages as necessary.
   a. Facility name: HRSD Mathews, Urbanna, and West Point STPs **EMERGENCY BACKUP PLAN**
   b. Contact Person: James Pletl
      Title: Chief of Technical Services
      Phone (757)460-4246
   c. Mailing address:
      Street or P.O. Box: PO Box 5911
      City or Town: Virginia Beach State: VA Zip: 23471
   d. Facility Address: Mathews STP 89 Brickbat Rd Mathews VA; Urbanna STP 110 Laurel Hill Rd Urbanna VA
      West Point 600 23rd Street West Point VA
   e. Total dry metric tons per 365-day period received from this facility: 0 dry metric tons
   f. Describe, on this form or on another sheet of paper, any treatment processes known to occur at the off-site facility, including blending activities and treatment to reduce pathogens or vector attraction characteristics:
      Receiving materials from these HRSD facilities is a contingency plan.. The solids would be trucked to the King William drying beds in the event that the drying beds at these facilities were unavailable. Solids would undergo aerobic digestion prior to transport.

3. Treatment Provided at Your Facility.
   a. Which class of pathogen reduction is achieved for the sewage sludge at your facility?
      ___Class A ___Class B __X_Neither or unknown
   b. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge:

   c. Which vector attraction reduction option is met for the sewage sludge at your facility?
      ___ Option 1 (Minimum 38 percent reduction in volatile solids)
      ___ Option 2 (Anaerobic process, with bench-scale demonstration)
      ___ Option 3 (Aerobic process, with bench-scale demonstration)
      ___ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
      ___ Option 5 (Aerobic processes plus raised temperature)
      ___ Option 6 (Raise pH to 12 and retain at 11.5)
      ___ Option 7 (75 percent solids with no unstabilized solids)
      ___ Option 8 (90 percent solids with unstabilized solids)
      _X_ None or unknown
   d. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vector attraction properties of sewage sludge:

   e. Describe, on this form or another sheet of paper, any other sewage sludge treatment activities, including blending, not identified in a - d above: Solids are dewatered in covered drying beds

4. Preparation of Sewage Sludge Meeting Ceiling and Pollutant Concentrations, Class A Pathogen Requirements and One of Vector Attraction Reduction Options 1-8 (EQ Sludge).
   (If sewage sludge from your facility does not meet all of these criteria, skip Question 4.)
   a. Total dry metric tons per 365-day period of sewage sludge subject to this section that is applied to the land:
      NA dry metric tons
   b. Is sewage sludge subject to this section placed in bags or other containers for sale or give-away?
      __Yes __No

5. Sale or Give-Away in a Bag or Other Container for Application to the Land.

(Complete this question if you place sewage sludge in a bag or other container for sale or give-away prior to land application. Skip this question if sewage sludge is covered in Question 4.)

a. Total dry metric tons per 365-day period of sewage sludge placed in a bag or other container at your facility for sale or give-away for application to the land: NA dry metric tons

b. Attach, with this application, a copy of all labels or notices that accompany the sewage sludge being sold or given away in a bag or other container for application to the land.

6. Shipment Off Site for Treatment or Blending. **EMERGENCY BACKUP PLAN**

(Complete this question if sewage sludge from your facility is sent to another facility that provides treatment or blending. This question does not apply to sewage sludge sent directly to a land application or surface disposal site. Skip this question if the sewage sludge is covered in Questions 4 or 5. If you send sewage sludge to more than one facility, attach additional sheets as necessary.)

a. Receiving facility name: HRSD West Point STP

b. Facility contact: James Pletl
Title: Chief of Technical Services Division
Phone: (757)460-4246

c. Mailing address:
Street or P.O. Box: PO Box 5911
City or Town: Virginia Beach State: VA Zip: 23471

d. Total dry metric tons per 365-day period of sewage sludge provided to receiving facility: 0 dry metric tons

e. List, on this form or an attachment, the receiving facility's VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the receiving facility's sewage sludge use or disposal practices:

Permit Number:	Type of Permit:
VA0075434	West Point VPDES

f. Does the receiving facility provide additional treatment to reduce pathogens in sewage sludge from your facility? ___Yes __X_No
Which class of pathogen reduction is achieved for the sewage sludge at the receiving facility?
___Class A ___Class B __X_Neither or unknown
Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce pathogens in sewage sludge:

g. Does the receiving facility provide additional treatment to reduce vector attraction characteristics of the sewage sludge? ___Yes __X_No
Which vector attraction reduction option is met for the sewage sludge at the receiving facility?
___ Option 1 (Minimum 38 percent reduction in volatile solids)
___ Option 2 (Anaerobic process, with bench-scale demonstration)
___ Option 3 (Aerobic process, with bench-scale demonstration)
___ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
___ Option 5 (Aerobic processes plus raised temperature)
___ Option 6 (Raise pH to 12 and retain at 11.5)
___ Option 7 (75 percent solids with no unstabilized solids)
___ Option 8 (90 percent solids with unstabilized solids)
__X_ None unknown
Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce vector attraction properties of sewage sludge:

h. Does the receiving facility provide any additional treatment or blending not identified in f or g above?
__X_Yes ___No
If yes, describe, on this form or another sheet of paper, the treatment processes not identified in f or g above:
In the event that the King William drying beds were unavailable, material would be transported to the HRSD facility listed above to be placed in their drying beds for dewatering. Dried solids would then be transported to the landfill. This is a contingency plan only to be used in emergencies.

i. If you answered yes to f., g or h above, attach a copy of any information you provide to the receiving facility to comply with the "notice and necessary information" requirement of 9 VAC 25-31-530.G.

j Does the receiving facility place sewage sludge from your facility in a bag or other container for sale or give-away for application to the land? ___Yes __X_No

If yes, provide a copy of all labels or notices that accompany the product being sold or given away.

k. Will the sewage sludge be transported to the receiving facility in a truck-mounted watertight tank normally used for such purposes? __X_ Yes ___ No. If no, provide description and specification on the vehicle used to transport the sewage sludge to the receiving facility.
Show the haul route(s) on a location map or briefly describe the haul route below and indicate the days of the week and the times of the day sewage sludge will be transported. Solids would be transported from Acquinton Church Road to Route 30. Turn right on Route 30. Turn left on 23rd Street in West Point during daytime business hours, Monday through Friday.

7. Land Application of Bulk Sewage Sludge. **NA**

(Complete Question 7.a if sewage sludge from your facility is applied to the land, unless the sewage sludge is covered in Questions 4, 5 or 6; complete Question 7.b, c & d only if you are responsible for land application of sewage sludge.)

a. Total dry metric tons per 365-day period of sewage sludge applied to all land application sites:_____dry metric tons

b. Do you identify all land application sites in Section C of this application? ___Yes ___No
If no, submit a copy of the Land Application Plan (LAP) with this application (LAP should be prepared in accordance with the instructions).

c. Are any land application sites located in States other than Virginia? ___Yes ___No
If yes, describe, on this form or on another sheet of paper, how you notify the permitting authority for the States where the land application sites are located. Provide a copy of the notification.

d. Attach a copy of any information you provide to the owner or lease holder of the land application sites to comply with the "notice and necessary" information requirement of 9 VAC 25-31-530 F and/or H (Examples may be obtained in Appendix IV).

8. Surface Disposal. **NA**

(Complete Question 8 if sewage sludge from your facility is placed on a surface disposal site.)

a. Total dry metric tons per 365-day period of sewage sludge from your facility placed on all surface disposal sites: _____ dry metric tons

b. Do you own or operate all surface disposal sites to which you send sewage sludge for disposal?
___Yes ___No
If no, answer questions c - g for each surface disposal site that you do not own or operate. If you send sewage sludge to more than one surface disposal site, attach additional pages as necessary.

c. Site name or number:

d. Contact person:
Title:
Phone: ( )
Contact is: ___Site Owner ___Site operator

e. Mailing address.
Street or P.O. Box:
City or Town:_____ State:_____ Zip:

f. Total dry metric tons per 365-day period of sewage sludge from your facility placed on this surface disposal site: _____ dry metric tons

g. List, on this form or an attachment, the surface disposal site VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the sewage sludge use or disposal practices at the surface disposal site:

Permit Number:	Type of Permit:
_____	
_____	

9. Incineration. **NA**

(Complete Question 9 if sewage sludge from your facility is fired in a sewage sludge incinerator.)

a. Total dry metric tons per 365-day period of sewage sludge from your facility fired in a sewage sludge incinerator: _____ dry metric tons

b. Do you own or operate all sewage sludge incinerators in which sewage sludge from your facility is fired?
___Yes ___No
If no, answer questions c - g for each sewage sludge incinerator that you do not own or operate. If you send sewage sludge to more than one sewage sludge incinerator, attach additional pages as necessary.

c. Incinerator name or number:

d. Contact person:
Title:
Phone: ( )
Contact is: ___Incinerator Owner ___Incinerator Operator

e. Mailing address.
Street or P.O. Box:
City or Town:_____ State:_____ Zip:

f. Total dry metric tons per 365-day period of sewage sludge from your facility fired in this sewage sludge incinerator: _____ dry metric tons

g. List on this form or an attachment the numbers of all other federal, state or local permits that regulate the firing of sewage sludge at this incinerator:

Permit Number:	Type of Permit:

10. Disposal in a Municipal Solid Waste Landfill. **See additional page for alternate landfill**

(Complete Question 10 if sewage sludge from your facility is placed on a municipal solid waste landfill. Provide the following information for each municipal solid waste landfill on which sewage sludge from your facility is placed. If sewage sludge is placed on more than one municipal solid waste landfill, attach additional pages as necessary.)

a. Landfill name: Waste Management Middle Peninsula Regional Landfill

b. Contact person: Judi Rick
Title: Scale Operator
Phone: (804) 693-5884
Contact is: ___Landfill Owner __X_Landfill Operator

c. Mailing address.
Street or P.O. Box: 3714 Waste Management Way
City or Town: Glenns State: VA Zip: 23149

d. Landfill location.
Street or Route #: 3714 Waste Management Way
County: Gloucester
City or Town: Glenns State: VA Zip: 23149

e. Total dry metric tons per 365-day period of sewage sludge placed in this municipal solid waste landfill:
0 dry metric tons

f. List, on this form or an attachment, the numbers of all federal, state or local permits that regulate the operation of this municipal solid waste landfill:

Permit Number:	Type of Permit:
572	DEQ-Waste

g. Does sewage sludge meet applicable requirements in the Virginia Solid Waste Management Regulation, 9 VAC 20-80-10 et seq., concerning the quality of materials disposed in a municipal solid waste landfill?
___Yes ___No NA

h. Does the municipal solid waste landfill comply with all applicable criteria set forth in the Virginia Solid Waste Management Regulation, 9 VAC 20-80-10 et seq.? __X_Yes ___No

i. Will the vehicle bed or other container used to transport sewage sludge to the municipal solid waste landfill watertight and covered? _X_ Yes ___ No
Show the haul route(s) on a location map or briefly describe the route below and indicate the days of the week and time of the day sewage sludge will be transported. Solids will be transported from Acquinton Church Road to Route 30. Make a right onto Route 30. Make a left on Route 33. Turn right on Route 17 (Glenns) and travel for three miles until the left turn onto Waste Management Way during daytime business hours Monday through Friday.

SECTION C. LAND APPLICATION OF BULK SEWAGE SLUDGE

Complete this section for sewage sludge that is land applied unless any of the following conditions apply:
The sewage sludge meets the Table 1 ceiling concentrations, the Table 3 pollutant concentrations, Class A pathogen requirements and one of the vector attraction reduction options 1-8 (fill out B.4 instead) (EQ Sludge); or
The sewage sludge is sold or given away in a bag or other container for application to the land (fill out B.5 instead); or
You provide the sewage sludge to another facility for treatment or blending (fill out B.6 instead).
Complete Section C for every site on which the sewage sludge that you reported in B.7 is land applied.

1. Identification of Land Application Site. **NA**
   a. Site name or number:
   b. Site location (Complete i and ii)
      i. Street or Route#:
      County:
      City or Town: _____ State: _____ Zip:
      ii. Latitude:_____ Longitude:
      Method of latitude/longitude determination
      _____ USGS map _____ Filed survey _____ Other
   c. Topographic map. Provide a topographic map (or other appropriate map if a topographic map is unavailable) that shows the site location.

2. Owner Information.
   a. Are you the owner of this land application site? ___Yes ___No
   b. If no, provide the following information about the owner:
      Name:
      Street or P.O. Box:
      City or Town: _____ State:_____ Zip:
      Phone: ( )

3. Applier Information:
   a. Are you the person who applies, or who is responsible for application of, sewage sludge to this land application site? ___Yes ___No
   b. If no, provide the following information for the person who applies the sewage sludge:
      Name:
      Street or P.O. Box:
      City or Town:_____ State:_____ Zip:
      Phone: ( )
   c. List, on this form or an attachment, the numbers of all federal, state or local permits that regulate the person who applies sewage sludge to this land application site:
      Permit Number: Type of Permit:
      _____
      _____

4. Site Type. Identify the type of land application site from among the following:
   ___Agricultural land ___Reclamation site ___Forest
   ___Public contact site ___Other. Describe

5. Vector Attraction Reduction.
   Are any vector attraction reduction requirements met when sewage sludge is applied to the land application site?
   ____Yes ____No If yes, answer a and b.
   a. Indicate which vector attraction reduction option is met:
      ___ Option 9 (Injection below land surface)
      ___ Option 10 (Incorporation into soil within 6 hours)
   b. Describe, on this form or on another sheet of paper, any treatment processes used at the land application site to reduce the vector attraction properties of sewage sludge:

6. Cumulative Loadings and Remaining Allotments.

(Complete Question 6 only if the sewage sludge applied to this site since July 20, 1993 is subject to the cumulative pollutant loading rates (CPLRs) - see instructions.)

a. Have you contacted DEQ or the permitting authority in the state where the sewage sludge subject to the CPLRs will be applied to ascertain whether bulk sewage sludge subject to the CPLRs has been applied to this site since July 20, 1993? ___Yes ___No
If no, sewage sludge subject to the CPLRs may not be applied to this site.
If yes, provide the following information:
Permitting authority:
Contact person:
Phone:( )

b. Based upon this inquiry, has bulk sewage sludge subject to the CPLRs been applied to this site since July 20, 1993? ___Yes ___No If no, skip the rest of Question 6. If yes, answer questions c - e.

c. Site size, in hectares: _____ (one hectare = 2.471 acres)

d. Provide the following information for every facility other than yours that is sending or has sent sewage sludge subject to the CPLRs to this site since July 20, 1993. If more than one such facility sends sewage sludge to this site, attach additional pages as necessary.
Facility name:
Facility contact:
Title:
Phone: ( )
Mailing address.
Street or P.O. Box:
City or Town:_____ State:_____ Zip:

e. Provide the total loading and allotment remaining, in kg/hectare, for each of the following pollutants:

	Cumulative loading	Allotment remaining
Arsenic		
Cadmium		
Copper		
Lead		
Mercury		
Nickel		
Selenium		
Zinc		

Complete Questions 7-12 below only if you apply sewage sludge, or you are responsible for land application of sewage sludge. Information required by these questions may be prepared as attachments to this form. Skip the following questions if you contract land application to someone else (as indicated under Section A.7) who is responsible for the operation.

7. Sludge Characterization. Use the table below or a separate attachment, provide at least one analysis for each parameter.

PCBs (mg/kg)
pH (S. U.)
Percent Solids (%)
Ammonium Nitrogen (mg/kg)
Nitrate Nitrogen (mg/kg)
Total Kjeldahl Nitrogen (mg/kg)
Total Phosphorus (mg/kg)
Total Potassium (mg/kg)
Alkalinity as $CaCO_3$* (mg/kg)

* Lime treated sludge (10% or more lime by dry weight) should be analyzed for percent $CaCO_3$.

8. Storage Requirements.

Existing and proposed sludge storage facilities must provide an estimated annual sludge balance on a monthly basis incorporating such factors as storage capacity, sludge production and land application schedule. Include pertinent calculations justifying storage requirements.

Proposed sludge storage facilities must also provide the following information:

a. A sludge storage site layout on a 7.5 minute topographic quadrangle or other appropriate scaled map to show the following topographic features of the surrounding landscape to a distance of 0.25 mile. Clearly mark the property line.
   1) Water wells, abandoned or operating
   2) Surface waters
   3) Springs
   4) Public water supply(s)
   5) Sinkholes
   6) Underground and/or surface mines
   7) Mine pool (or other) surface water discharge points
   8) Mining spoil piles and mine dumps
   9) Quarry(s)
   10) Sand and gravel pits
   11) Gas and oil wells
   12) Diversion ditch(s)
   13) Agricultural drainage ditch(s)
   14) Occupied dwellings, including industrial and commercial establishments
   15) Landfills or dumps
   16) Other unlined impoundments
   17) Septic tanks and drainfields
   18) Injection wells
   19) Rock outcrops

b. A topographic map of sufficient detail to clearly show the following information:
   1) Maximum and minimum percent slopes
   2) Depressions on the site that may collect water
   3) Drainageways that may attribute to rainfall run-on to or runoff from this site
   4) Portions of the site (if any) which are located with the 100-year floodplain and how the storage facility will be protected from flooding

c. Data and specifications for the storage facility lining material.

d. Plan and cross-sectional views of the storage facility.

e. Depth from the bottom of the storage facility to the seasonal high water table and separation distance to the permanent water table.

9. Land Area Requirements. Provide calculations justifying the land area requirements for land application of sewage sludge taking into consideration average soil productivity group, crop(s) to be grown and most limiting factor(s) of the sewage sludge, specifically Plant Available Nitrogen (PAN), Calcium Carbonate Equivalence (CCE), and metal loadings (CPLR sewage sludge only), where applicable. Relate PAN, CCE, and metal loadings to demonstrate the most limiting factor for land application.

10. Landowner Agreement Forms. Provide a properly completed Sewage Sludge Application Agreement Form (attached) for each landowner if sewage sludge is to be applied onto land not owned by the applicant.

11. Ground Water Monitoring.

Are any ground water monitoring data available for this land application site? ___Yes ___No

If yes, submit the ground water monitoring data with this permit application. Also submit a written description of the well locations, approximate depth to ground water, and the ground water monitoring procedures used to obtain these data.

12. Land Application Site Information.

(Complete Items a-d for sites receiving infrequent application - land application of sewage sludge up to the agronomic rate at a frequency of once in a 3 year period; complete Items a-h for sites receiving frequent application - land application of sewage sludge in excess of 70% the agronomic rate at a frequency greater than once in a 3 year period)

a. Provide a general location map for each county which clearly indicates the location of all the land application sites.

b. For each land application site provide a site plan of sufficient detail to clearly show the concerned landscape features and associated buffer zones (See instructions). Provide a legend for each landscape feature and the net acreage for each field taking into account the proposed buffer zones.

c. In order to ensure that land application of bulk sewage sludge will not impact federally listed threatened or endangered species or federally designated critical habitat, the applicant must notify the field office of the U. S. Department of the Interior, Fish and Wildlife Service (FWS), by a letter, the proposed land application activities with the identification of the land application sites. The address and phone number of FWS are provided below.

U. S. Fish and Wildlife Service
Virginia Field Office
P. O. Box 480
White Marsh, VA 23183
TEL: (804)693-6694

Provide a copy of the notification letter with this application form.

d. Provide a soil survey map, preferably photographically based, with the field boundaries clearly marked. (A USDA-SCS soil survey map should be provided, if available.)
Provide a detailed legend for each soil survey map which uses accepted USDA-SCS descriptions of the typifying pedon for each soil series (soil type). Complex associations may be described as a range of characteristics. Soil descriptions shall include as a minimum the following information.

1) Soil symbol
2) Soil series, textural phase and slope range
3) Depth to seasonal high water table
4) Depth to bedrock
5) Estimated soil productivity group (for the proposed crop rotation)

Item e - h are required for sites receiving frequent application of sewage sludge

e. In order to verify the information provided in item d, characterize the soil at each land application site. Representative soil borings or test pits to a depth of five feet or to bedrock if shallower, are to be coordinated for the typifying pedon of each soil series (soil type). Soil descriptions shall include as a minimum the following information:

1). Soil symbol
2). Soil series, textural phase and slope range
3). Depth to seasonal high water table
4). Depth to bedrock
5). Estimated soil productivity group (for the proposed crop rotation)

f. Collect and analyze soil samples from each field, weighted to best represent each of the soil borings performed for Item e. Using the table below or a separate attachment, provide at least one analysis per sample for each of the following parameters.

Soil Organic Matter (%)
Soil pH (std. units)
Cation Exchange Capacity (meq/100g)
Total Nitrogen (ppm)
Organic Nitrogen (ppm)
Ammonia Nitrogen (ppm)
Nitrate Nitrogen (ppm)
Available Phosphorus (ppm)
Exchangeable Potassium (mg/100g)
Exchangeable Sodium (mg/100g)
Exchangeable Calcium (mg/100g)
Exchangeable Magnesium (mg/100g)
Arsenic (ppm)
Cadmium (ppm)
Copper (ppm)
Lead (ppm)
Mercury (ppm)
Molybdenum (ppm)
Nickel (ppm)
Selenium (ppm)
Zinc (ppm)
Manganese (ppm)
Particle Size Analysis or
USDA Textural Estimate (%)

g. Relate the crop nutrient needs to anticipated yields, soil productivity rating and the various fertilizer or nutrient sources from sludge and chemical fertilizers. Describe any specialized agronomic management practices which may be required as a result of high soil pH. If the sludge is expected to possess an unusually high CCE or other unusual properties, provide a description of any plant tissue testing, supplemental fertilization or intensive agronomic management practices which may be necessary.

h. Using a narrative format and referencing any related charts, describe the proposed cropping system. Show how the crop rotation and management will be coordinated with the design of the land application system. Include any supplemental fertilization program, soil testing and the coordination of tillage practices, planting and harvesting schedules and timing of land application.

SEWAGE SLUDGE APPLICATION AGREEMENT

This sewage sludge application agreement is made on this date _____ between _____, referred to here as "landowner", and _____, referred to here as the "Permittee".

Landowner is the owner of agricultural land shown on the map attached as Exhibit A and designated there as _____ ("landowner's land"). Permittee agrees to apply and landowner agrees to comply with certain permit requirements following application of sewage sludge on landowner's land in amounts and in a manner authorized by VPDES permit number _____ which is held by the Permittee.

Landowner acknowledges that the appropriate application of sewage sludge will be beneficial in providing fertilizer and soil conditioning to the property. Moreover, landowner acknowledges having been expressly advised that, in order to protect public health, the following site restrictions must be adhered to when sewage sludge receives Class B treatment for pathogen reduction:

1. Food crops with harvested parts that touch the sewage sludge/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of sewage sludge;

2. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of sewage sludge when the sewage sludge remains on the land surface for four months or longer prior to incorporation into the soil;

3. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of sewage sludge when the sewage sludge remains on the land surface for less than four months prior to incorporation into the soil;

4. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of sewage sludge;

5. Animals shall not be grazed on the land for 30 days after application of sewage sludge;

6. Turf grown on land where sewage sludge is applied shall not be harvested for one year after application of the sewage sludge when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the State Water Control Board;

7. Public access to land with a high potential for public exposure shall be restricted for one year after application of sewage sludge;

8. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of sewage sludge.

9. Tobacco, because it has been shown to accumulate cadmium, should not be grown on landowner's land for three years following the application of sewage sludge borne cadmium equal to or exceeding 0.5 kilograms/hectare (0.45 pounds/acre).

Permittee agrees to notify landowner or landowner's designee of the proposed schedule for sewage sludge application and specifically prior to any particular application to landowner's land. This agreement may be terminated by either party upon written notice to the address specified below.

Landowner:	Permittee:
_____	_____
Signature	Signature
_____	_____
Mailing Address	Mailing Address

SECTION D. SURFACE DISPOSAL

Complete this section only if you own or operate a surface disposal site. Provide the information for each active sewage sludge unit.

1. Information on Active Sewage Sludge Units. **NA**
   a. Unit name or number:
   b. Unit location
      i. Street or Route#:
      County:
      City or Town: _____ State: _____ Zip:
      ii. Latitude:_____ Longitude:
      Method of latitude/longitude determination
      _____ USGS map _____ Filed survey _____ Other
   c. Topographic map. Provide a topographic map (or other appropriate map if a topographic map is unavailable) that shows the site location.
   d. Total dry metric tons of sewage sludge placed on the active sewage sludge unit per 365-day period:
      _____dry metric tons.
   e. Total dry metric tons of sewage sludge placed on the active sewage sludge unit over the life of the unit:
      _____ dry metric tons.
   f. Does the active sewage sludge unit have a liner with a minimum hydraulic conductivity of 1×10^{-7}cm/sec? ___Yes ___No If yes, describe the liner or attach a description.
   g. Does the active sewage sludge unit have a leachate collection system? ___Yes ___No
      If yes, describe the leachate collection system or attach a description. Also, describe the method used for leachate disposal and provide the numbers of any federal, state or local permits for leachate disposal:
   h. If you answered no to either f or g, answer the following:
      Is the boundary of the active sewage sludge unit less than 150 meters from the property line of the surface disposal site? ___Yes ___No If yes, provide the actual distance in meters:
   i. Remaining capacity of active sewage sludge unit, in dry metric tons:_____ dry metric tons
      Anticipated closure date for active sewage sludge unit, if known:_____ (MM/DD/YYYY)
      Provide with this application a copy of any closure plan developed for this active sewage sludge unit.

2. Sewage Sludge from Other Facilities.
   Is sewage sludge sent to this active sewage sludge unit from any facilities other than yours? ___Yes ___No
   If yes, provide the following information for each such facility, attach additional sheets as necessary.
   a. Facility name:
   b. Facility contact:
      Title:
      Phone: ( )
   c. Mailing address.
      Street or P.O. Box:
      City or Town:_____ State:_____ Zip:
   d. List, on this form or an attachment, the facility's VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the facility's sewage sludge management practices:
      Permit Number: Type of Permit:
      _____
      _____
   e. Which class of pathogen reduction is achieved before sewage sludge leaves the other facility?
      ___Class A ___Class B ___Neither or unknown
   f. Describe, on this form or on another sheet of paper, any treatment processes used at the other facility to reduce pathogens in sewage sludge:

g. Which vector attraction reduction option is achieved before sewage sludge leaves the other facility?
___ Option 1 (Minimum 38 percent reduction in volatile solids)
___ Option 2 (Anaerobic process, with bench-scale demonstration)
___ Option 3 (Aerobic process, with bench-scale demonstration)
___ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
___ Option 5 (Aerobic processes plus raised temperature)
___ Option 6 (Raise pH to 12 and retain at 11.5)
___ Option 7 (75 percent solids with no unstabilized solids)
___ Option 8 (90 percent solids with unstabilized solids)
___ None or unknown

h. Describe, on this form or another sheet of paper, any treatment processes used at the other facility to reduce vector attraction properties of sewage sludge:

i. Describe, on this form or another sheet of paper, any other sewage sludge treatment activities performed by the other facility that are not identified in e - h above:

3. Vector Attraction Reduction.

a. Which vector attraction reduction option, if any, is met when sewage sludge is placed on this active sewage sludge unit?
___ Option 9 (Injection below land surface)
___ Option 10 (Incorporation into soil within 6 hours)
___ Option 11 (Covering active sewage sludge unit daily)

b. Describe, on this form or another sheet of paper, any treatment processes used at the active sewage sludge unit to reduce vector attraction properties of sewage sludge:

4. Ground Water Monitoring.

a. Is ground water monitoring currently conducted at this active sewage sludge unit or are ground water monitoring data otherwise available for this active sewage sludge unit? ___Yes ___No
If yes, provide a copy of available ground water monitoring data. Also provide a written description of the well locations, the approximate depth to ground water, and the ground water monitoring procedures used to obtain these data.

b. Has a ground water monitoring program been prepared for this active sewage sludge unit?
___Yes ___No If yes, submit a copy of the ground water monitoring program with this application.

c. Have you obtained a certification from a qualified ground water scientist that the aquifer below the active sewage sludge unit has not been contaminated? ___Yes ___No
If yes, submit a copy of the certification with this application.

5. Site-Specific Limits.

Are you seeking site-specific pollutant limits for the sewage sludge placed on the active sewage sludge unit?
___Yes ___No If yes, submit information to support the request for site-specific pollutant limits with this application.

Title:

Phone: ( )
Contact is: ___Incinerator Owner ___Incinerator Operator

e. Mailing address.
Street or P.O. Box:
City or Town:_____ State:_____ Zip:

f. Total dry metric tons per 365-day period of sewage sludge from your facility fired in this sewage sludge incinerator: _____ dry metric tons

g. List on this form or an attachment the numbers of all other federal, state or local permits that regulate the firing of sewage sludge at this incinerator:

Permit Number:	Type of Permit:
_____	
_____	

10. Disposal in a Municipal Solid Waste Landfill. **Alternate Landfill**

(Complete Question 10 if sewage sludge from your facility is placed on a municipal solid waste landfill. Provide the following information for each municipal solid waste landfill on which sewage sludge from your facility is placed. If sewage sludge is placed on more than one municipal solid waste landfill, attach additional pages as necessary.)

a. Landfill name: Browning Ferris Industries King & Queen Sanitary Landfill

b. Contact person: Steven Doyle
Title: Special Waste Sales Representative
Phone: (804) 226-6197 Cell: 804-479-0916
Contact is: X Landfill Owner ___Landfill Operator

c. Mailing address.
Street or P.O. Box: 1000 Iris Road
City or Town: Little Plymouth State: VA Zip: 23091

d. Landfill location.
Street or Route #: 1000 Iris Road
County: King and Queen
City or Town: Little Plymouth State: VA Zip: 23091

e. Total dry metric tons per 365-day period of sewage sludge placed in this municipal solid waste landfill:
0 dry metric tons

f. List, on this form or an attachment, the numbers of all federal, state or local permits that regulate the operation of this municipal solid waste landfill:

Permit Number:	Type of Permit:
554	DEQ-Waste
_____	

h. Does sewage sludge meet applicable requirements in the Virginia Solid Waste Management Regulation, 9 VAC 20-80-10 et seq., concerning the quality of materials disposed in a municipal solid waste landfill?
___Yes ___No NA

h. Does the municipal solid waste landfill comply with all applicable criteria set forth in the Virginia Solid Waste Management Regulation, 9 VAC 20-80-10 et seq.? X Yes ___No

i. Will the vehicle bed or other container used to transport sewage sludge to the municipal solid waste landfill watertight and covered? X Yes ___ No
Show the haul route(s) on a location map or briefly describe the route below and indicate the days of the week and time of the day sewage sludge will be transported. Solids will be transported from Acquinton Church Road to Route 30. Make a right onto Route 30. Make a left on Route 33. Turn left on Route 14 and right on Little Plymouth for 2 miles. Turn right on Iris Road and follow to transfer station during daytime business hours Monday through Friday.

VPDES Permit Application Addendum

1. **Entity to whom the permit is to be issued**: Hampton Roads Sanitation District
Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.

2. **Is this facility located within city or town boundaries?** Y / (N)

3. **What is the tax map parcel number for the land where this facility is located?** 28-33E

4. **For the facility to be covered by this permit, how many acres will be disturbed during the next five years due to new construction activities?** 0.5

5. ALL FACILITIES: **What is the design average flow of this facility?** 0.10 MGD
Industrial facilities: **What is the max. 30-day avg. production level (include units)?** _____

In addition to the above design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels? Y / (N)

If AYes≅, please specify the other flow tiers (in MGD) or production levels:
_____
Please consider: Is your facility=s design flow considerably greater than your current flow? Do you plan to expand operations during the next five years?

6. **Nature of operations generating wastewater**:
Private residence, carwash, restaurants

90 % of flow from domestic connections/sources
Number of private residences to be served by the wastewater treatment facilities: __ 0 __ 1-49 X 50 or more

10 % of flow from non-domestic connections/sources

7. **Mode of discharge**: X Continuous __Intermittent __Seasonal
Describe frequency and duration of intermittent or seasonal discharges:
Continuous discharge is anticipated when the expansion is completed.

8. **Identify the characteristics of the receiving stream at the point just above the facility=s discharge point:**
X Permanent stream, never dry
__ Intermittent stream, usually flowing, sometimes dry
__ Ephemeral stream, wet-weather flow, often dry
__ Effluent-dependent stream, usually or always dry
__ Lake or pond at or below the discharge point
__ Other: _____

9. **Approval Date(s)**:
O & M Manual 06/05/2000 **Sludge/Solids Management Plan** 03/08/2005

Have there been any changes in your operations or procedures since the above approval dates? Y / (N)

HRSD
P. O. BOX 5911, VIRGINIA BEACH, VIRGINIA 23471-0911 • (757) 460-2261 FAX (757) 460-2372
www.hrsd.com

August 11, 2006

RECEIVED
AUG 14 2006
PRO

Mrs. Gina Kelly
Dept. of Environmental Quality
Piedmont Regional Office
4949-A Cox Road
Glen Allen, VA 23060

RE: King William STP VA0088102
Permit Modification

Dear Mrs. Kelly:

HRSD requests a permit modification of the King William STP VPDES permit (VA0088102) to increase capacity to 100,000 gallons per day. Enclosed is permit application Form 2A. The King William County Board of Supervisors requested that HRSD expand the plant to meet the needs of proposed development in the area. HRSD has responded to their request by developing design plans for a membrane-bioreactor (MBR) system facility with a capacity of 0.10 MGD. The plant will consist of two 50,000 gallon per day trains. The current 25,000 gallon per day facility will remain on site during construction.

HRSD has received the Certificate to Construct from Reed Barrows of the Office of Wastewater Engineering. Currently, HRSD has a bid proposal out for construction of the expanded facility with the plan to have the bid awarded at the September HRSD Commission meeting.

HRSD informally discussed plans to expand the facility to 0.10 MGD with your office during the last permit reissuance. At that time, it was concluded that an expansion to 50,000 gallons would be adequate to serve the needs of the community. However, due to an acceleration of development both underway and expected in the near future, HRSD believes it to be more efficient to expand to 0.10 MGD in one phase instead of two phases.

Based on our previous discussion, DEQ performed modeling to assess the impact of a 0.10 MGD facility and determine potential permit limits. HRSD has included copies of these DEQ documents to assist in your review of this permit modification.

A check for $3750 has been sent to the Receipts Control of DEQ to satisfy the permit modification fee. A copy of the check and fee form is included in this package. The permit application has been signed by Acting General Manager Ed Romm. The HRSD Commission appointed Mr. Romm to serve as the executive officer while a search for a candidate to assume this position permanently is in progress.

Please contact my office if you have any questions or desire further information.

Sincerely,

James J. Pletl, Ph.D.
Chief of Technical Services Division

Enclosure

FACILITY NAME AND PERMIT NUMBER:

King William STP VA0088102

Form Approved 1/14/99
OMB Number 2040-0086

FORM 2A NPDES

NPDES FORM 2A APPLICATION OVERVIEW

APPLICATION OVERVIEW

Form 2A has been developed in a modular format and consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet. The Basic Application Information packet is divided into two parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 0.1 mgd must also complete Part B. Some applicants must also complete the Supplemental Application Information packet. The following items explain which parts of Form 2A you must complete.

BASIC APPLICATION INFORMATION:

A. **Basic Application Information for all Applicants.** All applicants must complete questions A.1 through A.8. A treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.12.

B. **Additional Application Information for Applicants with a Design Flow ≥ 0.1 mgd.** All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.

C. **Certification.** All applicants must complete Part C (Certification).

SUPPLEMENTAL APPLICATION INFORMATION:

D. **Expanded Effluent Testing Data.** A treatment works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):

1. Has a design flow rate greater than or equal to 1 mgd,
2. Is required to have a pretreatment program (or has one in place), or
3. Is otherwise required by the permitting authority to provide the information.

E. **Toxicity Testing Data.** A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):

1. Has a design flow rate greater than or equal to 1 mgd,
2. Is required to have a pretreatment program (or has one in place), or
3. Is otherwise required by the permitting authority to submit results of toxicity testing.

F. **Industrial User Discharges and RCRA/CERCLA Wastes.** A treatment works that accepts process wastewater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:

1. All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
2. Any other industrial user that:
   a. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions); or
   b. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
   c. Is designated as an SIU by the control authority.

G. **Combined Sewer Systems.** A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).

ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)

FACILITY NAME AND PERMIT NUMBER:

King William STP VA0088102

Form Approved 1/14/99
OMB Number 2040-0086

BASIC APPLICATION INFORMATION

PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:

All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet.

A.1. Facility Information.

Facility name: King William STP

Mailing Address: P.O. Box 5911 Virginia Beach, VA 23471-0911

Contact person: James Pletl

Title: Chief of Technical Services Division

Telephone number: 757-460-4246

Facility Address (not P.O. Box): 542 Acquinton Church Road King William VA 23086

A.2. Applicant Information. If the applicant is different from the above, provide the following:

Applicant name: Hampton Roads Sanitation District

Mailing Address: P.O. Box 5911 Virginia Beach, VA 23471-0911

Contact person: James Pletl

Title: Chief of Technical Services Division

Telephone number: 757-460-4246

Is the applicant the owner or operator (or both) of the treatment works?

X owner X operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

___ facility X applicant

A.3. Existing Environmental Permits. Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

NPDES VA0088102 PSD ___

UIC ___ Other ___

RCRA ___ Other ___

A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name	Population Served	Type of Collection System	Ownership
King William	1600	separate	municipal

Total population served 1600

A.5. Indian Country.

a. Is the treatment works located in Indian Country?

_____ Yes X No

b. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?

_____ Yes X No

A.6. Flow. Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal.

a. Design flow rate 0.025 mgd See A.8.d Wastewater is pumped and hauled.

	Two Years Ago	Last Year	This Year	
b. Annual average daily flow rate				mgd
c. Maximum daily flow rate				mgd

A.7. Collection System. Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each.

X Separate sanitary sewer 100 %

_____ Combined storm and sanitary sewer _____ %

A.8. Discharges and Other Disposal Methods.

a. Does the treatment works discharge effluent to waters of the U.S.? X Yes _____ No

If yes, list how many of each of the following types of discharge points the treatment works uses:

i. Discharges of treated effluent 1

ii. Discharges of untreated or partially treated effluent _____

iii. Combined sewer overflow points _____

iv. Constructed emergency overflows (prior to the headworks) _____

v. Other _____ _____

b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.? _____ Yes X No

If yes, provide the following for each surface impoundment:

Location: _____

Annual average daily volume discharged to surface impoundment(s) _____ mgd

Is discharge _____ continuous or _____ intermittent?

c. Does the treatment works land-apply treated wastewater? _____ Yes X No

If yes, provide the following for each land application site:

Location: _____

Number of acres: _____

Annual average daily volume applied to site: _____ Mgd

Is land application _____ continuous or _____ intermittent?

d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works? X Yes _____ No

If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).

Tank Truck Wastewater hauled 4-5 times per day to HRSD West Point STP.

If transport is by a party other than the applicant, provide:

Transporter name: _____

Mailing Address: _____

_____

Contact person: _____

Title: _____

Telephone number: _____

For each treatment works that receives this discharge, provide the following:

Name: HRSD West Point STP

Mailing Address: P.O. Box 5911
Virginia Beach, VA 23471

Contact person: James Pletl

Title: Chief of Technical Services Division

Telephone number: 757-460-4246

If known, provide the NPDES permit number of the treatment works that receives this discharge. VA0075434

Provide the average daily flow rate from the treatment works into the receiving facility. 0.009 mgd

e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8.a through A.8.d above (e.g., underground percolation, well injection)? ____ Yes X No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable):

_____

Annual daily volume disposed of by this method: _____

Is disposal through this method ____ continuous or ____ intermittent?

WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 **once for each outfall** (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. **If you answered "no" to question A.8.a**, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

A.9. Description of Outfall.

a. Outfall number: 001

b. Location

(City or town, if applicable) King William — (Zip Code) 23109

(County) King William — (State) Virginia

(Latitude) 37 42 24 — (Longitude) 77 08 39

c. Distance from shore (if applicable): NA ft.

d. Depth below surface (if applicable): NA ft.

e. Average daily flow rate: 0.0 mgd

f. Does this outfall have either an intermittent or a periodic discharge? ____ Yes X No (go to A.9.g.)

If yes, provide the following information:

Number of times per year discharge occurs: ____

Average duration of each discharge: ____

Average flow per discharge: ____ mgd

Months in which discharge occurs: ____

g. Is outfall equipped with a diffuser? ____ Yes X No

A.10. Description of Receiving Waters.

a. Name of receiving water: Moncuin Creek

b. Name of watershed (if known): ____

United States Soil Conservation Service 14-digit watershed code (if known): ____

c. Name of State Management/River Basin (if known): ____

United States Geological Survey 8-digit hydrologic cataloging unit code (if known): ____

d. Critical low flow of receiving stream (if applicable):
acute ____ cfs chronic ____ cfs

e. Total hardness of receiving stream at critical low flow (if applicable): ____ mg/l of $CaCO_3$

January 8, 2004 DEQ memorandum regarding Flow frequency determination is attached.

MEMORANDUM

DEPARTMENT OF ENVIRONMENTAL QUALITY
Piedmont Regional Office
4949-A Cox Road Glen Allen, Virginia 23060

SUBJECT: Flow Frequency Determination
HRSD-King William STP – VA0088102

TO: Gina Ebbett

FROM: Jennifer Palmore

DATE: January 8, 2004

COPIES: File

The Hampton Roads Sanitation District – King William STP discharges to Moncuin Creek near Manquin, VA. The discharge is located at rivermile 8-MNQ003.75. Flow frequencies have been requested at this site for use in developing effluent limitations for the VPDES permit.

The previous flow frequency request was performed in 1997 by correlating stream flow measurements taken on Acquinton Creek at the Route 629 bridge (#01673620) to the same day daily mean measurements taken at both the stream gauge on Totopotomoy Creek near Studley, VA (#01673550) and the gauge on Beaverdam Swamp near Ark, VA (#0167000). The measurements and daily mean values were plotted by the USGS on a logarithmic graph and a best-fit line was drawn through the data points. The flow frequencies at Acquinton Creek were determined from the graph. The flow frequencies at the discharge point on Moncuin Creek were then determined by using a drainage area proportion between the Acquinton Creek site and the discharge point.

However, in discussions with Mark Alling, it is believed that Acquinton Creek is not an appropriate comparison to Moncuin Creek. Although the streams have similar drainage areas, Acquinton Creek goes dry frequently, however he has not witnessed Moncuin with zero flow.

Since Acquinton Creek was deemed inappropriate, a regression analysis between stream measurements taken at Matadequin Creek near Tunstall, VA (#01673600) and the Totopotomoy Creek gage was performed, since Matadequin is believed to be more similar to Moncuin Creek. Matadequin Creek is located in the same DCR watershed as Moncuin, Acquinton, and Totopotomoy Creeks. A regression between Matadequin and Totopotomoy Creeks was performed, however the correlation was below acceptable levels (R=0.77) and was not used.

The flow frequencies for Moncuin Creek were calculated by drainage area proportion directly from the Totopotomoy Creek near Studley gage. The data for that gage and the discharge point are presented below:

Totopotomoy Creek near Studley, VA (#01673550):
Drainage area = 26.2 mi^2

1Q10 = 0.29 cfs	High Flow 1Q10 = 4.5 cfs
7Q10 = 0.44 cfs	High Flow 7Q10 = 5.8 cfs
30Q10 = 1.5 cfs	High Flow 30Q10 = 9.0 cfs
30Q5 = 2.1 cfs	HM = 7.6 cfs

Moncuin Creek at discharge point:
Drainage Area = 9.01 mi^2

1Q10 = 0.10 cfs	High Flow 1Q10 = 1.5 cfs
7Q10 = 0.15 cfs	High Flow 7Q10 = 2.0 cfs
30Q10 = 0.52 cfs	High Flow 30Q10 = 3.1 cfs
30Q5 = 0.72 cfs	HM = 2.6 cfs

This analysis does not address any withdrawals, discharges, or springs influencing the flow in Moncuin Creek upstream of the discharge point. The high flow months are January through May.

If you have any questions concerning this analysis, please let me know.

MEMORANDUM

DEPARTMENT OF ENVIRONMENTAL QUALITY
Piedmont Regional Office

4949-A Cox Road, Glen Allen, VA 23060-6296 804/527-5020

SUBJECT: Stream Sanitation Analysis – Moncuin Creek
HRSD-King William STP discharge (VA0088102)

TO: Gina Ebbett

FROM: Jennifer Palmore

DATE: March 3, 2004

COPIES: Mark Alling, Model File

A request for a stream sanitation analysis for the HRSD-King William sewage treatment plant (STP) discharge was received on February 3, 2004. The request was submitted because the permittee has requested a tiered increase in design flow from the current 0.025 MGD to 0.05, 0.1, and finally 0.15 MGD.

The STP discharges into Moncuin Creek near Manquin in King William County. The current limits were recommended by Jon van Soestbergen in 1997 (memo attached). At that time, the flow frequency analysis indicated that the 7Q10 of Moncuin Creek was 0.0 cfs. The analysis was performed by correlating stream measurements taken on Acquinton Creek at the Route 629 bridge (#01673620) with the stream gauge on Totopotomoy Creek near Studley (#0167000) and then doing a drainage area comparison between Acquinton and Moncuin Creeks. As the 7Q10 was 0.0 cfs, the stream was determined to be unmodelable and limits were recommended based on best professional judgement. However, the memo indicates that the stream was free flowing at the discharge point with a marshy area 1.6 miles downstream that should be used as a boundary condition at which DEQ swamp limits would be applied in any future modeling.

An updated flow frequency analysis was performed on 1/8/2004. Acquinton Creek was deemed to be a poor comparison to Moncuin and the flow frequencies were recalculated by drainage area comparison between Moncuin and Totopotomoy Creeks. The analysis indicated a 7Q10 flow of 0.15 cfs, indicating that there is flow at 7Q10 conditions.

A site visit was performed on March 2, 2004. As previously stated, the stream has a defined channel and stream flow was high. Moncuin Creek was therefore modeled using Regional Model 4.1. The stream is deemed a Tier 1 water because it is currently on the 303(d) list Total Maximum Daily Load Priority List as impaired of the Aquatic Life Use due to violations of the pH standard. The impairment is attributed to natural conditions. The stream is also impaired of the Recreation Use due to fecal coliform exceedances, however this is not a factor in the Tier determination.

The following discharge limits are recommended to maintain water quality standards in Moncuin Creek and to meet the DEQ swamp limits at the downstream boundary:

Q = 0.05 MGD	Q = 0.1 MGD	Q = 0.15 MGD
$cBOD_5$ = 19 mg/L	$cBOD_5$ = 13 mg/L	$cBOD_5$ = 10 mg/L
TKN = 3 mg/L	TKN = 3 mg/L	TKN = 3 mg/L
DO = 5 mg/L	DO = 5 mg/L	DO = 5 mg/L

The modeling documentation is attached. If you have any questions or need any additional information, please do not hesitate to contact me.

Attachment E

Effluent Data

Parameter	Maximum Daily Value		Average Daily Value		
	Value	Units	Value	Units	No. Samples
pH (minimum)	6.0	s.u.			
pH (maximum)	8.5	s.u.			
Flow Rate	0.0030	MGD	0.002	MGD	cont.
Temperature (Winter)	16	°C	12	°C	90
Temperature (Summer)	25	°C	23	°C	91

Pollutant	Maximum Daily Discharge		Average Daily Discharge		
	Conc.	Units	Conc.	Units	No. Samples
$cBOD_5$	5	mg/L	4	mg/L	7
Fecal Coliform	2400	mpn/ 100mL	18	pn/ 100mL	22
TSS	25	mg/L	13	mg/L	7

pH	pH	pH	Temp C	Temp C	Temp C
7.7	6.3	6.9	23	18.2	18.0
7.9	6.1	6.6	23.9	16.0	16.0
8.0	6.0	7.1	24.7	16.2	16.3
7.2	6.3	7.2	24.1	16.0	17.7
7.7	6.2	7.8	24.1	15.0	18.5
7.4	6.2	6.8	21.0	15.0	17.4
8.3	6.2	7.3	24.6	16.8	17.0
7.5	6.1	7.6	24.7	18.0	16.0
7.2	6.0	6.1	23.5	16.0	18.0
7.5	6.3	7.0	24.5	19.6	19.0
7.5	8.2	7.3	25.0	19.7	19.2
8.2	8.1	7.8	21.9	17.8	18.8
8.5	6.1	6.8	21.0	17.4	16.4
8.1	7.1	6.2	21.0	14	18.0
7.9	7.2	6.6	21.0	13	16.4
7.4	7.4	7.3	19.0	11.1	17.2
7.5	6.7	7.6	22.4	13.0	15.3
7.1	6.6	6.5	21.0	15.0	16.7
7.3	7.0	6.5	22.0	15.4	17.6
7.2	6.8	6.1	23.3	14.4	18.3
6.8	6.6	7.7	22.4	15.0	16.0
7.2	7.0	7.9	23.1	15.9	16.4
7.1	6.4	6.2	22.0	14.3	10.9
6.4	6.3	8.1	22	14.4	9.8
6.7	7.0	6.7	27.5	13.9	9.0
6.5	6.7	7.7	23.0	14.4	7.0
7.0	6.2	7.3	24.9	13.2	6.0
6.7	6.1	7.4	21.5	14.0	11
6.9	6.2	6.9	20.3	14.4	9.2
6.4	7.3	6.9	22.0	11.0	10.7
6.8	6.2	6.9	20.1	10.0	12.4
6.6	7.0	6.9	20.0	14.0	10.0
6.5	6.7	7.7	21.0	15.0	10.0
6.7	6.6	8.4	21.3	14.0	8.5
6.8	7.1	7.5	20.5	11.7	13.2
6.6	7.3	8.2	20.5	12.8	12.2
7.2	6.8	6.1	20.3	11.0	7.3
7.2	6.8	6.3	20.0	12.0	9.0
6.3	6.9	6.4	20.0	14.0	11.2
7.2	6.8	6.5	20.3	12.7	10.5
7.3	7.0	6.5	19.0	12.0	10.8
7.0	6.6	6.2	17.7	11.7	10.9
6.5	6.5	6.1	19.2	9.8	10.0
6.5	6.3	7.1	19.0	9.6	13.0
6.5	6.1	6.3	20.5	9.7	11.0
90th%		7.7	90th%		23
10th%		6.2	10th%		10
Average		6.9	Average		17

Additional temperature and pH data to the left were submitted by the permittee on July 12, 2004 via email. These data were collected from September 1999 through March 2000.

Attachment C

Ambient Data

Date and Time	Temp Celsius (°C)	Field pH (S.U.)	Do Probe (mg/L)
1/23/04 10:10	1.13	7.89	15.35
11/7/03 17:20	17.44	7.05	8.06
9/5/03 9:45	24.08	7.34	7.81
7/14/03 16:50	25.66	6.93	7.22
5/20/03 13:00	15.08	7.01	10.5
3/24/03 13:30	14.05	6.68	9.79
1/22/03 13:40	0.65	7.49	14.5
9/18/02 14:00	26.28	9.43	10.16
9/13/02 13:30	24.5	9.34	10.44
7/17/02 14:25	30.12	8.62	7.56
6/10/02 12:45	27.31	7.96	7.67
4/10/02 11:30	16.1	7.48	9.41
2/19/02 12:15	5.99	8.01	11.95
12/18/01 14:30	10.1	7.18	10.39
10/10/01 12:35	14.72	8.51	10.4
8/13/01 13:20	26.35	7.22	6.72
6/18/01 13:10	27.39	7.39	9.65
Average	18	7.7	9.9
10th%	4.0	7.0	7.4
90th%	27	8.9	13

Data collected from the station at 8-MNQ004.19.

Date and Time	Hardness (mg/L as $CaCO_3$)
3/24/03 13:30	30.1
1/22/03 13:40	60.5
11/12/02 15:00	39.8
11/12/02 15:00	40
9/18/02 14:00	89.8
7/17/02 14:25	120
6/10/02 12:45	93.9
4/10/02 11:30	70.5
2/19/02 12:15	33.7
12/18/01 14:30	50
10/10/01 12:35	108
6/18/01 13:10	24.4
Average	63
10th%	30
90th%	107

REGIONAL MODELING SYSTEM VERSION 4.0

Model Input File for the Discharge to MONCUIN CREEK.

File Information

File Name:	E:\models\HRSD King William 0.1 mgd.mod
Date Modified:	March 03, 2004

Water Quality Standards Information

Stream Name:	MONCUIN CREEK
River Basin:	York River Basin
Section:	3
Class:	III - Nontidal Waters (Coastal and Piedmont)
Special Standards:	None

Background Flow Information

Gauge Used:	01673550 Totopotomoy Creek near Studley
Gauge Drainage Area:	26.2 Sq.Mi.
Gauge 7Q10 Flow:	0.28 MGD
Headwater Drainage Area:	9.01 Sq.Mi.
Headwater 7Q10 Flow:	9.629007E-02 MGD (Net; Includes Withdrawals/Discharges)
Withdrawal/Discharges:	0 MGD
Incremental Flow in Segments:	1.068702E-02 MGD/Sq.Mi.

Background Water Quality

Background Temperature:	24 Degrees C
Background cBOD5:	2 mg/l
Background TKN:	0 mg/l
Background D.O.:	7.621368 mg/l

Model Segmentation

Number of Segments:	1
Model Start Elevation:	19 ft above MSL
Model End Elevation:	7 ft above MSL

REGIONAL MODELING SYSTEM VERSION 4.0

Model Input File for the Discharge to MONCUIN CREEK.

Segment Information for Segment 1

Definition Information

Segment Definition:	A discharge enters.
Discharge Name:	VA0088102 - HRSD KING WILLIAM STP
VPDES Permit No.:	VA0088102

Discharger Flow Information

Flow:	0.1 MGD
cBOD5:	13 mg/l
TKN:	3 mg/l
D.O.:	5 mg/l
Temperature:	25 Degrees C

Geographic Information

Segment Length:	1.6 miles
Upstream Drainage Area:	9.01 Sq.Mi.
Downstream Drainage Area:	0 Sq.Mi.
Upstream Elevation:	19 Ft.
Downstream Elevation:	7 Ft.

Hydraulic Information

Segment Width:	1.75 Ft.
Segment Depth:	0.192 Ft.
Segment Velocity:	0.904 Ft./Sec.
Segment Flow:	0.196 MGD
Incremental Flow:	-0.096 MGD (Applied at end of segment.)

Channel Information

Cross Section:	Wide Shallow Arc
Character:	Moderately Meandering
Pool and Riffle:	No
Bottom Type:	Silt
Sludge:	None
Plants:	None
Algae:	None

"Model Run For E:\models\HRSD King William 0.1 mgd.mod On 3/3/04 10:52
:49 AM"

"Model is for MONCUIN CREEK."
"Model starts at the VA0088102 - HRSD KING WILLIAM STP discharge."

"Background Data"

"7Q10",	"cBOD5",	"TKN",	"DO",	"Temp"
"(mgd)",	"(mg/l)",	"(mg/l)",	"(mg/l)",	"deg C"
.0963,	2,	0,	7.621,	24

"Discharge/Tributary Input Data for Segment 1"

"Flow",	"cBOD5",	"TKN",	"DO",	"Temp"
"(mgd)",	"(mg/l)",	"(mg/l)",	"(mg/l)",	"deg C"
.1,	13,	3,	,5,	25

"Hydraulic Information for Segment 1"

"Length",	"Width",	"Depth",	"Velocity"
"(mi)",	"(ft)",	"(ft)",	"(ft/sec)"
1.6,	1.75,	.192,	.904

"Initial Mix Values for Segment 1"

"Flow",	"DO",	"cBOD",	"nBOD",	"DOSat",	"Temp"
"(mgd)",	"(mg/l)",	"(mg/l)",	"(mg/l)",	"(mg/l)",	"deg C"
.1963,	6.286,	19.01,	0,	8.399,	24.50945

"Rate Constants for Segment 1. - (All units Per Day)"

"k1",	"k1@T",	"k2",	"k2@T",	"kn",	"kn@T",	"BD",	"BD@T"
1.2,	1.476,	4.5,	5.008,	.35,	.495,	0,	0

"Output for Segment 1"
"Segment starts at VA0088102 - HRSD KING WILLIAM STP"

"Total",	"Segm."			
"Dist.",	"Dist.",	"DO",	"cBOD",	"nBOD"
"(mi)",	"(mi)",	"(mg/l)",	"(mg/l)",	"(mg/l)"
0,	0,	6.286,	19.01,	0
.1,	.1,	6.171,	18.821,	0
.2,	.2,	6.061,	18.634,	0
.3,	.3,	5.957,	18.449,	0
.4,	.4,	5.858,	18.266,	0
.5,	.5,	5.764,	18.085,	0
.6,	.6,	5.675,	17.905,	0
.7,	.7,	5.591,	17.727,	0
.8,	.8,	5.511,	17.551,	0
.9,	.9,	5.436,	17.377,	0
1,	1,	5.365,	17.204,	0
1.1,	1.1,	5.298,	17.033,	0
1.2,	1.2,	5.235,	16.864,	0
1.3,	1.3,	5.176,	16.697,	0
1.4,	1.4,	5.12,	16.531,	0
1.5,	1.5,	5.068,	16.367,	0

```
1.6,      1.6,      5.019,     16.204,    0


"END OF FILE"
```

FACILITY NAME AND PERMIT NUMBER:

King William STP VA0088102

Form Approved 1/14/99
OMB Number 2040-0086

A.11. Description of Treatment.

a. What levels of treatment are provided? Check all that apply.

_____ Primary _____ Secondary

X Advanced _____ Other. Describe: _____

b. Indicate the following removal rates (as applicable):

Design BOD_5 removal or Design $CBOD_5$ removal	98	%
Design SS removal	97	%
Design P removal	99	%
Design N removal	96	%
Other _____		%

c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.

ultraviolet radiation

If disinfection is by chlorination, is dechlorination used for this outfall? _____ Yes _____ No

d. Does the treatment plant have post aeration? X Yes _____ No

A.12. Effluent Testing Information. All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 001 Grab sample data from Sep 1999 to Feb 2000

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	6.0	s.u.			
pH (Maximum)	8.5	s.u.			
Flow Rate	0.03	MGD	0.002	MGD	cont
Temperature (Winter) Dec-Feb	16	Celsius	12	Celsius	90
Temperature (Summer) Sep-Nov	25	Celsius	23	Celsius	91

* For pH please report a minimum and a maximum daily value

POLLUTANT		MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
		Conc.	Units	Conc.	Units	Number of Samples		Report limit
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.								
BIOCHEMICAL OXYGEN	BOD-5							
DEMAND (Report one)	CBOD-5	5	mg/l	12	mg/l	7	SM5210B	2
FECAL COLIFORM		2400	N/CML	18	N/CML	22	SM9222D	1
TOTAL SUSPENDED SOLIDS (TSS)		25	mg/l	13	mg/l	7	SM2540D	1

END OF PART A.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

Report limit is lowest concentration at which quantitation is demonstrated.

BASIC APPLICATION INFORMATION

PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).

All applicants with a design flow rate ≥ 0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification).

B.1. Inflow and Infiltration. Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.

unknown gpd

Briefly explain any steps underway or planned to minimize inflow and infiltration.

Collection system is new

B.2. Topographic Map. Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.)

a. The area surrounding the treatment plant, including all unit processes.

b. The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.

c. Each well where wastewater from the treatment plant is injected underground.

d. Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.

e. Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.

f. If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

B.3. Process Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g, chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram.

Proposed schematic for 0.1 MGD facility is attached.

B.4. Operation/Maintenance Performed by Contractor(s).

Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? ____Yes X No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name: _____

Mailing Address: _____

_____

Telephone Number: _____

Responsibilities of Contractor: _____

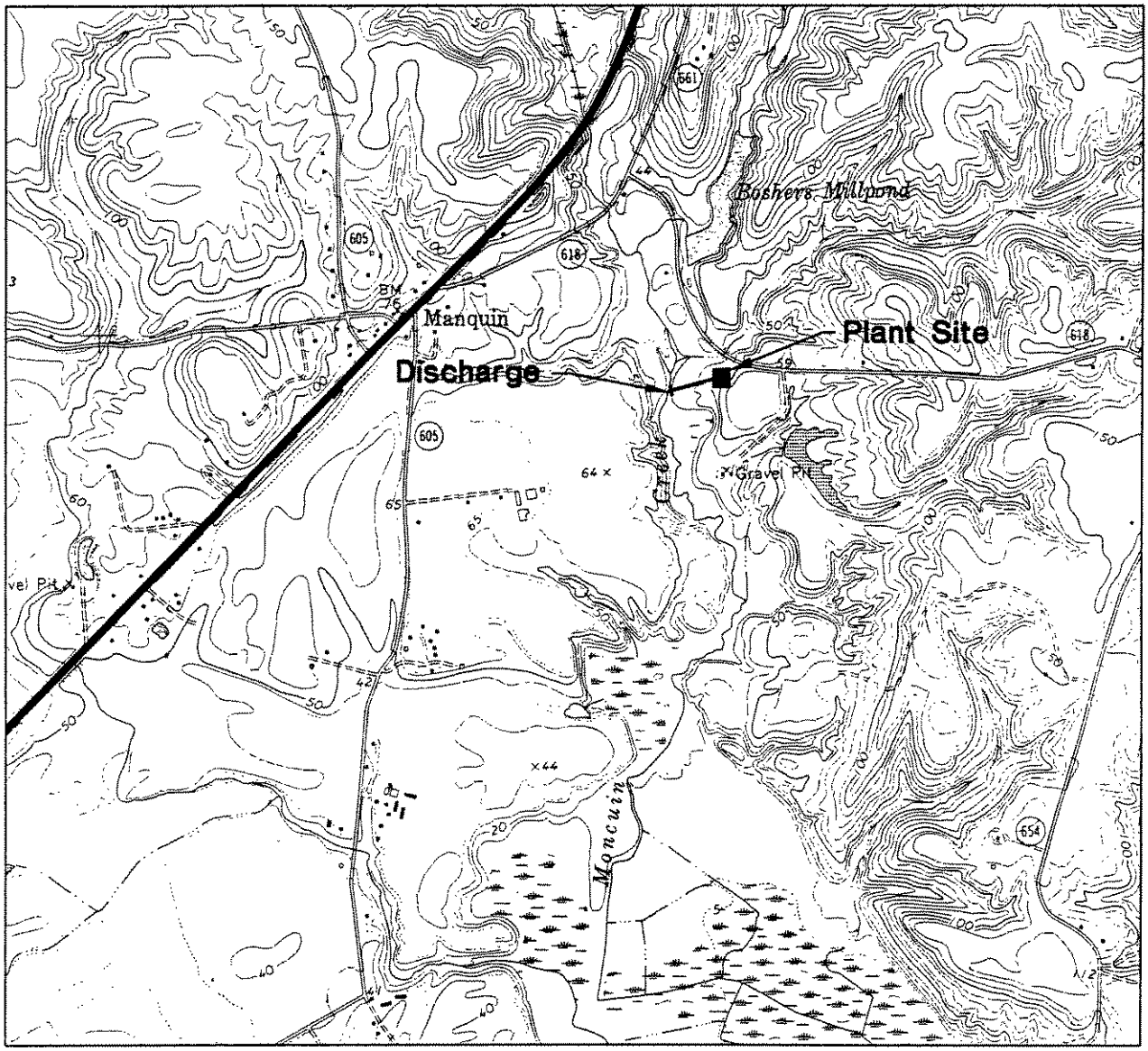
B.5. Scheduled Improvements and Schedules of Implementation. Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

a. List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.

001

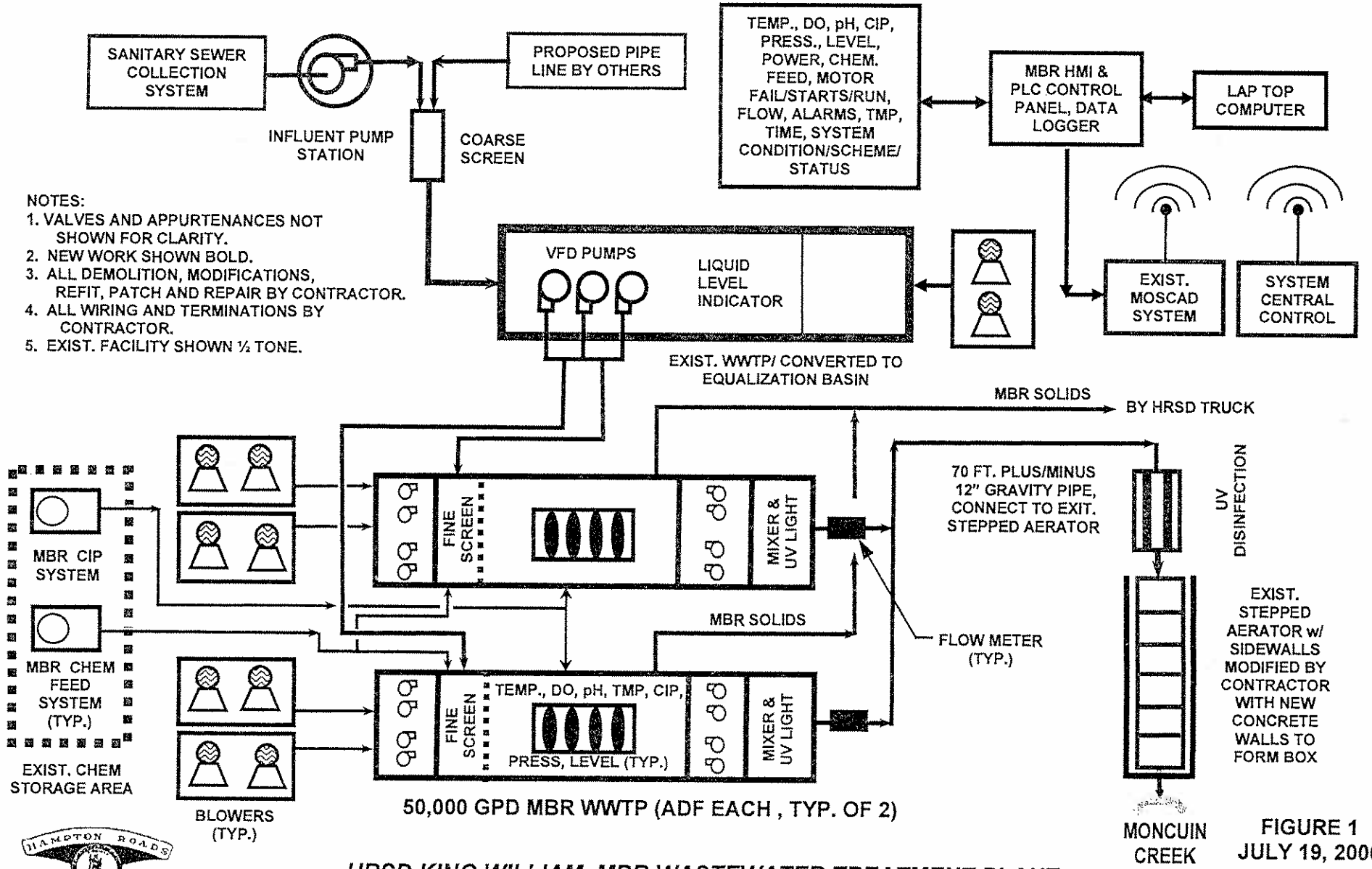
b. Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.

____Yes X No



Location Map
for
King William STP

October 2003 **Scale: 1"=2000'** **USGS Map Reference**



50,000 GPD MBR WWTP (ADF EACH , TYP. OF 2)

FIGURE 1
JULY 19, 2006

HRSD KING WILLIAM MBR WASTEWATER TREATMENT PLANT

NOT TO SCALE

HAMPTON ROADS SANITATION DISTRICT

McKIM&CREED

c If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).

d. Provide dates imposed by any compliance schedule or any actual dates of completion for the implementation steps listed below, as applicable. For improvements planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. Indicate dates as accurately as possible.

Implementation Stage	Schedule MM / DD / YYYY	Actual Completion MM / DD / YYYY
– Begin construction	10/16/2006	__/__/____
– End construction	4/14/2007	__/__/____
– Begin discharge	4/14/2007	__/__/____
– Attain operational level	8/1/2007	__/__/____

e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained? X Yes ___No

Describe briefly: Certificate to Construct has been issued by DEQ in July 2006.

B.6. EFFLUENT TESTING DATA (GREATER THAN O.1 MGD ONLY).

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall Number: No data available. Operation is currently pump and haul

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	Report limit ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.							
AMMONIA (as N)							
CHLORINE (TOTAL RESIDUAL, TRC)							
DISSOLVED OXYGEN							
TOTAL KJELDAHL NITROGEN (TKN)							
NITRATE PLUS NITRITE NITROGEN							
OIL and GREASE							
PHOSPHORUS (Total)							
TOTAL DISSOLVED SOLIDS (TDS)							
OTHER							

END OF PART B.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

Report limit is lowest concentration at which quantitation is demonstrated.

FACILITY NAME AND PERMIT NUMBER:

King William STP VA0088102

Form Approved 1/14/99
OMB Number 2040-0086

BASIC APPLICATION INFORMATION

PART C. CERTIFICATION

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:

X Basic Application Information packet

Supplemental Application Information packet:

____ Part D (Expanded Effluent Testing Data)

____ Part E (Toxicity Testing: Biomonitoring Data)

____ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)

____ Part G (Combined Sewer Systems)

ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title: Ed Romm Acting General Manager

Signature: Edward D Romm

Telephone number: 757-460-2261

Date signed: August 11, 2006

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:

SUPPLEMENTAL APPLICATION INFORMATION

PART D. EXPANDED EFFLUENT TESTING DATA

Refer to the directions on the cover page to determine whether this section applies to the treatment works.

Effluent Testing: 1.0 mgd and Pretreatment Treatment Works. If the treatment works has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
METALS (TOTAL RECOVERABLE), CYANIDE, PHENOLS, AND HARDNESS.											
ANTIMONY											
ARSENIC											
BERYLLIUM											
CADMIUM											
CHROMIUM											
COPPER											
LEAD											
MERCURY											
NICKEL											
SELENIUM											
SILVER											
THALLIUM											
ZINC											
CYANIDE											
TOTAL PHENOLIC COMPOUNDS											
HARDNESS (AS $CaCO_3$)											
Use this space (or a separate sheet) to provide information on other metals requested by the permit writer.											

FACILITY NAME AND PERMIT NUMBER:

King William STP VA0088102 NA

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Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
VOLATILE ORGANIC COMPOUNDS.											
ACROLEIN											
ACRYLONITRILE											
BENZENE											
BROMOFORM											
CARBON TETRACHLORIDE											
CLOROBENZENE											
CHLORODIBROMO-METHANE											
CHLOROETHANE											
2-CHLORO-ETHYLVINYL ETHER											
CHLOROFORM											
DICHLOROBROMO-METHANE											
1,1-DICHLOROETHANE											
1,2-DICHLOROETHANE											
TRANS-1,2-DICHLORO-ETHYLENE											
1,1-DICHLOROETHYLENE											
1,2-DICHLOROPROPANE											
1,3-DICHLORO-PROPYLENE											
ETHYLBENZENE											
METHYL BROMIDE											
METHYL CHLORIDE											
METHYLENE CHLORIDE											
1,1,2,2-TETRACHLORO-ETHANE											
TETRACHLORO-ETHYLENE											
TOLUENE											

Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	Report limit ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
1,1,1-TRICHLOROETHANE											
1,1,2-TRICHLOROETHANE											
TRICHLORETHYLENE											
VINYL CHLORIDE											
Use this space (or a separate sheet) to provide information on other volatile organic compounds requested by the permit writer.											
ACID-EXTRACTABLE COMPOUNDS											
P-CHLORO-M-CRESOL											
2-CHLOROPHENOL											
2,4-DICHLOROPHENOL											
2,4-DIMETHYLPHENOL											
4,6-DINITRO-O-CRESOL											
2,4-DINITROPHENOL											
2-NITROPHENOL											
4-NITROPHENOL											
PENTACHLOROPHENOL											
PHENOL											
2,4,6-TRICHLOROPHENOL											
Use this space (or a separate sheet) to provide information on other acid-extractable compounds requested by the permit writer.											
BASE-NEUTRAL COMPOUNDS.											
ACENAPHTHENE											
ACENAPHTHYLENE											
ANTHRACENE											
BENZIDINE											
BENZO(A)ANTHRACENE											

BENZO(A)PYRENE											

FACILITY NAME AND PERMIT NUMBER:
King William STP VA0088102 NA

Form Approved 1/14/99
OMB Number 2040-0086

Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
3,4 BENZO-FLUORANTHENE											
BENZO(GHI)PERYLENE											
BENZO(K)FLUORANTHENE											
BIS (2-CHLOROETHOXY) METHANE											
BIS (2-CHLOROETHYL)-ETHER											
BIS (2-CHLOROISO-PROPYL) ETHER											
BIS (2-ETHYLHEXYL) PHTHALATE											
4-BROMOPHENYL PHENYL ETHER											
BUTYL BENZYL PHTHALATE											
2-CHLORONAPHTHALENE											
4-CHLORPHENYL PHENYL ETHER											
CHRYSENE											
DI-N-BUTYL PHTHALATE											
DI-N-OCTYL PHTHALATE											
DIBENZO(A,H) ANTHRACENE											
1,2-DICHLOROBENZENE											
1,3-DICHLOROBENZENE											
1.4-DICHLOROBENZENE											
3,3-DICHLOROBENZIDINE											
DIETHYL PHTHALATE											
DIMETHYL PHTHALATE											
2,4-DINITROTOLUENE											
2,6-DINITROTOLUENE											

1,2-DIPHENYLHYDRAZINE											

FACILITY NAME AND PERMIT NUMBER:

King William STP VA0088102 NA

Form Approved 1/14/99
OMB Number 2040-0086

Outfall number: _____ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
FLUORANTHENE											
FLUORENE											
HEXACHLOROBENZENE											
HEXACHLOROBUTADIENE											
HEXACHLOROCYCLO-PENTADIENE											
HEXACHLOROETHANE											
INDENO(1,2,3-CD)PYRENE											
ISOPHORONE											
NAPHTHALENE											
NITROBENZENE											
N-NITROSODI-N-PROPYLAMINE											
N-NITROSODI- METHYLAMINE											
N-NITROSODI-PHENYLAMINE											
PHENANTHRENE											
PYRENE											
1,2,4-TRICHLOROBENZENE											

Use this space (or a separate sheet) to provide information on other base-neutral compounds requested by the permit writer.

Use this space (or a separate sheet) to provide information on other pollutants (e.g., pesticides) requested by the permit writer.

END OF PART D.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

SUPPLEMENTAL APPLICATION INFORMATION

PART E. TOXICITY TESTING DATA

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

E.1. Required Tests.

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

____chronic ____acute

E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

	Test number:_____	Test number:_____	Test number:_____
a. Test information.			
Test species & test method number			
Age at initiation of test			
Outfall number			
Dates sample collected			
Date test started			
Duration			
b. Give toxicity test methods followed.			
Manual title			
Edition number and year of publication			
Page number(s)			
c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.			
24-Hour composite			
Grab			
d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)			
Before disinfection			
After disinfection			
After dechlorination			

	Test number:_____	Test number:_____	Test number:_____
e. Describe the point in the treatment process at which the sample was collected.			
Sample was collected:			
f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.			
Chronic toxicity			
Acute toxicity			
g. Provide the type of test performed.			
Static			
Static-renewal			
Flow-through			
h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.			
Laboratory water			
Receiving water			
i. Type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.			
Fresh water			
Salt water			
j. Give the percentage effluent used for all concentrations in the test series.			
k. Parameters measured during the test. (State whether parameter meets test method specifications)			
pH			
Salinity			
Temperature			
Ammonia			
Dissolved oxygen			
l. Test Results.			
Acute:			
Percent survival in 100% effluent	%	%	%
LC_{50}			
95% C.I.	%	%	%
Control percent survival	%	%	%
Other (describe)			

Chronic:			
NOEC	%	%	%
IC_{25}	%	%	%
Control percent survival	%	%	%
Other (describe)			

m. Quality Control/Quality Assurance.

Is reference toxicant data available?			
Was reference toxicant test within acceptable bounds?			
What date was reference toxicant test run (MM/DD/YYYY)?			
Other (describe)			

E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

____Yes ____No If yes, describe: _____

_____

_____

E.4. Summary of Submitted Biomonitoring Test Information. If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

Date submitted: _____ (MM/DD/YYYY)

Summary of results: (see instructions)

_____

_____

END OF PART E.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

GENERAL INFORMATION:

F.1. Pretreatment Program. Does the treatment works have, or is it subject to, an approved pretreatment program?

____Yes ____No

F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs. _____

b. Number of CIUs. _____

SIGNIFICANT INDUSTRIAL USER INFORMATION:

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

F.3. Significant Industrial User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: _____

Mailing Address: _____

_____

F.4. Industrial Processes. Describe all of the industrial processes that affect or contribute to the SIU's discharge.

_____

F.5. Principal Product(s) and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): _____

Raw material(s): _____

F.6. Flow Rate.

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

_____ gpd (_____continuous or _____intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

_____ gpd (_____continuous or _____intermittent)

F.7. Pretreatment Standards. Indicate whether the SIU is subject to the following:

a. Local limits ____Yes ____No

b. Categorical pretreatment standards ____Yes ____No

If subject to categorical pretreatment standards, which category and subcategory?

_____

F.8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU. Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

____Yes ____No If yes, describe each episode.

_____

_____

RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:

F.9. RCRA Waste. Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe?
____Yes ___No (go to F.12.)

F.10. Waste Transport. Method by which RCRA waste is received (check all that apply):

_____Truck _____Rail _____Dedicated Pipe

F.11. Waste Description. Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA Hazardous Waste Number	Amount	Units

CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:

F.12. Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

____Yes (complete F.13 through F.15.) ____No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

F.13. Waste Origin. Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in the next five years).

_____

_____

_____

F.14. Pollutants. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

_____

_____

F.15. Waste Treatment.

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

____Yes ____No

If yes, describe the treatment (provide information about the removal efficiency):

_____

_____

b. Is the discharge (or will the discharge be) continuous or intermittent?

____Continuous ____Intermittent If intermittent, describe discharge schedule.

_____

END OF PART F.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:

King William STP VA0088102 NA

Form Approved 1/14/99
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SUPPLEMENTAL APPLICATION INFORMATION

PART G. COMBINED SEWER SYSTEMS

If the treatment works has a combined sewer system, complete Part G.

G.1. System Map. Provide a map indicating the following: (may be included with Basic Application Information)

a. All CSO discharge points.

b. Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding natural resource waters).

c. Waters that support threatened and endangered species potentially affected by CSOs.

G.2. System Diagram. Provide a diagram, either in the map provided in G.1. or on a separate drawing, of the combined sewer collection system that includes the following information:

a. Locations of major sewer trunk lines, both combined and separate sanitary.

b. Locations of points where separate sanitary sewers feed into the combined sewer system.

c. Locations of in-line and off-line storage structures.

d. Locations of flow-regulating devices.

e. Locations of pump stations.

CSO OUTFALLS:

Complete questions G.3 through G.6 once for each CSO discharge point.

G.3. Description of Outfall.

a. Outfall number _____

b. Location

_____
(City or town, if applicable) (Zip Code)

_____
(County) (State)

_____
(Latitude) (Longitude)

c. Distance from shore (if applicable) _____ ft.

d. Depth below surface (if applicable) _____ ft.

e. Which of the following were monitored during the last year for this CSO?

____Rainfall ____CSO pollutant concentrations ____CSO frequency

____CSO flow volume ____Receiving water quality

f. How many storm events were monitored during the last year? _____

G.4. CSO Events.

a. Give the number of CSO events in the last year.

_____ events (___ actual or ___ approx.)

b. Give the average duration per CSO event.

_____ hours (____ actual or ____ approx.)

c. Give the average volume per CSO event.

_____ million gallons (_____ actual or _____ approx.)

d. Give the minimum rainfall that caused a CSO event in the last year.

_____ inches of rainfall

G.5. Description of Receiving Waters.

a. Name of receiving water: _____

b. Name of watershed/river/stream system: _____

United States Soil Conservation Service 14-digit watershed code (if known): _____

c. Name of State Management/River Basin: _____

United States Geological Survey 8-digit hydrologic cataloging unit code (if known): _____

G.6. CSO Operations.

Describe any known water quality impacts on the receiving water caused by this CSO (e.g., permanent or intermittent beach closings, permanent or intermittent shell fish bed closings, fish kills, fish advisories, other recreational loss, or violation of any applicable State water quality standard).

_____

_____

END OF PART G.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
PERMIT APPLICATION FEE FORM
EFFECTIVE JULY 1, 2004

INSTRUCTIONS

Applicants for individual Virginia Pollutant Discharge Elimination System (VPDES), Virginia Pollution Abatement (VPA), Virginia Water Protection (VWP), Surface Water Withdrawal (SWW), and Ground Water Withdrawal (GWW) Permits are required to pay permit application fees, except farming operations engaged in production for market. Fees are also required for registration for coverage under General Permits except for the general permits for sewage treatment systems with discharges of 1,000 gallons per day (GPD) or less and for Corrective Action Plans for leaking underground storage tanks. Except for VWP permits, fees must be paid when applications for permit issuance, reissuance* or modification are submitted. Applicants for VWP permits will be notified by the DEQ of the fee due. Applications will be considered incomplete if the proper fee is not paid and will not be processed until the fee is received. (* - the reissuance fee does not apply to VPDES and VPA permits - see the fee schedule included with this form for details.)

The permit fee schedule is included with this form. Fees for permit issuance or reissuance and for permit modification are included. Once you have determined the fee for the type of application you are submitting, complete this form. The original copy of the form and your check or money order payable to "Treasurer of Virginia" should be mailed to:

Department of Environmental Quality
Receipts Control
P.O. Box 10150
Richmond, VA 23240

A copy of the form and a copy of your check or money order should accompany the permit application. You should retain a copy for your records. Please direct any questions regarding this form or fee payment to the DEQ Office to which you are submitting your application.

APPLICANT NAME: Hampton Road Sanitation District **SSN/FIN:** 54-600-1749

ADDRESS: 1436 Air Rail Avenue **DAYTIME PHONE:** (757) 460-2261
Area Code

Virginia Beach, VA 23455

FACILITY/ACTIVITY NAME: King William STP

LOCATION: 542 Acquinton Church Road King William, VA 23086

TYPE OF PERMIT APPLIED FOR (from Fee Schedule): VPDES Municipal Minor =>100,000 gpd

TYPE OF ACTION: _____ New Issuance _____ Reissuance ✓ Modification

AMOUNT OF FEE SUBMITTED (from Fee Schedule): 3750

EXISTING PERMIT NUMBER (if applicable): VA0088102

DEQ OFFICE TO WHICH APPLICATION SUBMITTED (check one)

☐ Abingdon/SWRO	☐ Harrisonburg/VRO	☐ Woodbridge/NVRO	☐ Lynchburg/SCRO
☑ Richmond/PRO	☐ Richmond/Headquarters	☐ Roanoke/WCRO	☐ Virginia Beach/TRO

FOR DEQ USE ONLY
Date:_____
DC #:_____

Original Form and Check - DEQ Receipts Control, Richmond
Copy of Form and Copy of Check - DEQ Regional Office or Permit Program Office

HRSD - P.O. Box 5915 Virginia Beach, Virginia 23471-0915

NAME: TREASURER OF VIRGINIA

VENDOR ID: 990517 DATE: 07/28/06 CHECK NO.: 00354266

INVOICE NUMBER	DESCRIPTION	AMOUNT	DISCOUNT	AMOUNT
FEE KING WILLIAM STP		3750.00	0.00	3750.00

DETACH BEFORE DEPOSITING 3750.00

REMOVE DOCUMENT ALONG THIS PERFORATION

THE FACE OF THIS CHECK IS VOID IF GREEN BACKGROUND IS ABSENT. THE REVERSE SIDE OF THIS DOCUMENT HAS AN ARTIFICIAL WATERMARK AND MICROPRINTING

HAMPTON ROADS SANITATION DISTRICT

P.O. BOX 5915
VIRGINIA BEACH, VIRGINIA 23471-0915

DATE
07/28/06

Bank of America
Virginia
68-1/510

CHECK NO: 00354266

AMOUNT
$3,750.00****

VOID AFTER 90 DAYS

PAY THREE THOUSAND SEVEN HUNDRED FIFTY DOLLARS AND 00 CENTS

(NOT VALID FOR OVER $500,000.00 UNLESS COUNTERSIGNED)

TO THE ORDER OF
TREASURER OF VIRGINIA
DEQ-RECEIPTS CONTROL
P O BOX 10150
RICHMOND VA 23240-0150

John A Maricalco

⑈00354266⑈ ⑆051000017⑆ 004112811895⑈